| NWS FORM E-5 (11-88) | U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | HYDROLOGIC SERVICE AREA (HSA) |
|-------------------------|---|--|
| (PRES. BY WSOM E-41) | NATIONAL WEATHER SERVICE | WFO Jackson, Mississippi |
| MONTHLY R | EPORT OF RIVER AND FLOOD CONDITIONS | REPORT FOR: MONTH YEAR January 2002 |
| | Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283 | SIGNATURE Jim Stefkovich, MIC In Charge of HSA DATE February 13th . 2002 |

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)

The month of January was characterized by a series of fronts and/or gulf lows moving over the area. The month began with a rare 3 to 5 inch snow in the southern part of the JAN HSA. On the 5^{th} and 6^{th} , a low pushed through southern MS giving the area from 3/4 to 2 1/2 inches of rain. The heaviest rainfall fell in northeast LA. (Oak Grove, LA reported 2.57 inches in 24 hours). On the 11-13th, a weak gulf low moved through southern sections giving the area from 1/4 to 1 inch of rainfall. A weak frontal system and a series of weak upper air disturbances moved across the area from 18^{th} to 20^{th} . Rainfall amount over this period ranged from 1/4 to 2 inches with isolated 2^{th} inch amounts reported.

The most significant event for January occurred between the $23^{\rm rd}$ and the $25^{\rm th}$. A cold front slowed as it approached northeast LA, southeast AR, and north and northwest portions of the HSA in Mississippi. Small stream and flash flooding were common across this area on the $24^{\rm th}$. Rainfall amounts over these areas for the 72 hour period ranged from 3 to 7 inches. Heaviest 24 hour rainfall amounts were at Greenville, MS (5.70 inches), Dermott, AR (4.18 inches), Stoneville, MS (4.07 inches), and at Leland, MS (4.05 inches). After slowing over the above areas, the front moved very rapidly through the remainder of the area only bringing 1 to 2 inches with isolated 3 inch amounts. Another cold front began pushing through the area on the $31^{\rm st}$. Rainfall amounts were generally light.

Wetter than normal soil conditions and heavy rainfall amounts during the last portion of the month caused rivers over the Lower Yazoo System and the Big Black River system to rise above flood once again. The Big Sunflower river again experienced moderate flooding. The Yalobusha has been above flood stage since early December and crested four feet above flood stage in late January. Minor to moderate flooding once again occurred over the Big Black River basin. The upper Pearl River at Philadelphia had some minor flooding while the lower Pearl went just to flood stage at Monticello. Soil conditions in central and southern MS were near seasonal to above season normals at the end of the month.

| RIVER BASIN | <u>RAINFALL</u> <u>D</u> I | EPARTURE FROM NORMS | |
|--|----------------------------|---|--|
| Southeast Arkansas (Chicot & Ashley counties) | 7.50 to 9.00 inches | Much above normal | |
| northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita) | 3.00 to 10.00 inches | Above to much above normal over north sections and below to much below over southern sections | |
| Lower Yazoo | 5.00 to 9.75 inches | Near normal over southern sections to much above normal over northern sections | |
| Big Black | 4.75 to 7.00 inches | Below normal over lower and middle portions of the basin. Above normal over the upper basin. | |
| Homochitto/ Bayou Pierre | 4.00 to 4.50 inches | Below to much Below normal. | |
| Pearl (abv Jackson) | 4.00 to 5.00 inches | Below normal | |
| Pearl (Blo Jackson) | 4.00 to 7.00 inches | Below to near normal | |
| Pascagoula | 4.50 to 8.50 inches | Below normal on the upper Leaf River. Much above normal along Tallahala Creek to near normal all other areas. | |

The heaviest rainfall amounts in the HSA for the month were 9.84 inches at Bastrop, LA; 9.57 inches at Elliot, MS; 9.52 inches at Grenada, MS; 9.37 inches at Stoneville, MS; 9.32 inches at Greenville, MS; 9.15 inches at Dermott, AR.

Here at the WFO, the January monthly rainfall was 5.60 inches, which was -0.07 inches below normal.

The Mississippi River from Arkansas City to Natchez began the month much higher than the end of the month. River stages during the first few days and the last days of the month were above or much above seasonal norms; for remainder of the month, river stages were below to much below seasonal norms. The provisional high and low stages for January are listed below:

| Location | High Stage(ft) | Date | Low Stage(ft) | Date |
|-------------------|----------------|-------|---------------|-------|
| Arkansas City, AR | 24.95 | 01/01 | 4.92 | 01/18 |
| Greenville, MS | 36.39 | 01/01 | 16.18 | 01/18 |
| Vicksburg, MS | 35.29 | 01/01 | 11.11 | 01/20 |
| Natchez, MS | 44.43 | 01/01 | Gage out | |

Total Flood Warning products issued: 15
Total Flood Statement products issued: 175
Daily Rainfall Products (RRA'S) issued 31
Daily River Forecast Products (RVS'S) issued 31
Daily River Stage products (RVA'S) issued 31

Marty V. Pope Service Hydrologist

CC: USGS Little Rock District
USGS Ruston District
USCE Mobile District
USCE Vicksburg District
USCE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
LMRFC
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center